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August, 1906

American Journal of Progressive Therapeutics

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Consolidation of { The American X Ray Journal
The Archives of Electrology
and Radiology

Electrical Science
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Official Organ of the American Progressive Therapeutic
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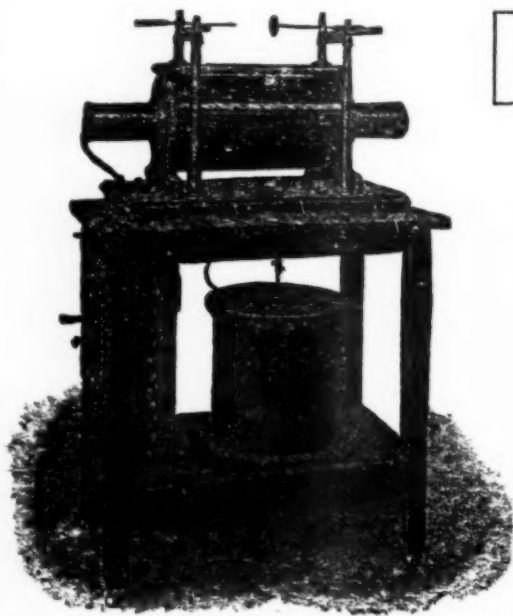
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VOL. XIX

PROSPECTUS

1906

The American Journal of Progressive Therapeutics

Consolidation of THE AMERICAN X-RAY JOURNAL and
THE ARCHIVES OF ELECTROLOGY AND RADIOLOGY

Published Monthly by The American Progressive Publishing Co.

H. PRESTON PRATT, M. D., Editor.

A. W. SMITH, M. D., Associate Editor.

The official organ of the American Progressive Therapeutic Society, The Illinois Progressive Therapeutic Society and The Chicago Progressive Therapeutic Society.

The American Journal of Progressive Therapeutics is devoted to Electrical Science, X-Ray Photography, Electro-Therapy, Radio-Therapy, Photo-Therapy, Thermo-Therapy, Hydro-Therapy, Animal-Therapy and Psycho-Therapy. In fact, every new therapy of value will find place in its columns. Medical, Dental and Surgical application of Electricity and allied forces.

It is the aim of this Journal to supplement this work by giving information in departments other than drug-therapy, and to offer a forum in which new views and new methods may receive a fair hearing and impartial criticism.

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This Journal is the leading scientific publication in this country along the lines of Progressive Therapeutics. It will be enlarged and greatly improved this year, and it will be our aim to assist the general practitioner by reviews of valuable articles found in "up-to-date" medical literature, and the hospitals and colleges by publishing reports of important clinical cases. You cannot very well afford to be without it.

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CHICAGO, ILL., AUGUST, 1906.

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ELECTROLYSIS—SOME RECENT INTERESTING CASES

BY H. PERKINS FITZPATRICK, M. D., CHICAGO.

Electrolysis has of recent years made decided progress. I am sure there is no other specialty so interesting and conclusive. Interesting because something new, something rare, in dermatology presents itself for treatment by this method from year to year. Conclusive because with experience you know what electrolysis will accomplish, and you therefore can eliminate all guesswork, and definitely and with certainty decompose all unnatural obstructions of the external ducts and glands (Miliun Cysts). Can readily obliterate superficial capillaries (Telangiectasis, Naevi). Can set up sufficient inflammation around inert, but unsightly particles, to dislodge and remove them (powder marks, tattoo marks, etc.). Can positively remove all normal or abnormal hirsuties (moles, warts, etc.). Can unquestionably remove all normal or abnormal hirsute growths (hair on the face, ingrowing eyelashes, etc.). Can so thoroly tattoo any pigmented surface with electrolysis as to prevent further pigmentary deposits and likewise carry off all pigment previously deposited (moth patches, naevi pigmentosus and pigmentosus pilons, freckles, xanthoma, etc.). Can prevent possibility of

benign growths, becoming malignant by complete and assured electrolysation, while still benign (cutaneous cornus, warts, moles, etc.).

Right here I want to emphasize what ten years' experience has demonstrated to make my own convictions a practical certainty, and that is that no mole, no abnormal elevated growth, no tissue once thoroly and competently treated by electrolysis will or can ever appear again. I have probably treated as many cases as any dermatologist in the country, and I have kept in touch with cases treated until I am now assured that once completely decomposed, no growth will ever return or be the seat of a carcinomatous development. This one discovery is extremely gratifying, because it is not infrequent to successfully treat growths that have been previously removed (but not exterminated) by the surgeon's knife. There is but one reasonably accurate theory in explanation of failure by knife and success by electrolysis and that is that some elements essential to its vitality are outside the scope of the operation by knife and they re-establish a new growth in the site of the one imperfectly removed; whereas the

electric current insinuates its mysterious decomposing elements into every fiber of the growth, occludes and obliterates as unerringly as the ligature, every blood vessel that feeds it. With its source of nutrition gone, with its elements broken up and disintegrated, we find that what we would most naturally expect to occur, does occur. The growth desiccates, a healthy crust replaces it and in a few days this crust is thrown off and we have a smooth, even surface, cosmetically perfect, and as I also believe, an assured certainty of its remaining that way permanently. Few who have not given the subject of electrolysis much thought, realize its possibilities in many cases outside the well known and clearly demonstrated channels of usefulness. How many of you, for instance, have given its antiseptic properties a moment's thought; how many of you realize that this agent will destroy microbic life with as much certainty as the best chemical antiseptics known. I have never seen a pimple or pustule that resulted from electrolysis, but I have time and again opened small abscesses, furuncles, acne pustules, etc., by this method, and after evacuating the pus seen it heal up without the use of any other agent.

For local anesthesia, the positive pole being used, the cataphoretic effects of electrolysis are so well known that it is hardly necessary to go into the subject extensively, but I am quite certain that surprising and gratifying results would follow the use of this same method if adopted to convey all chemical antiseptics into seats of local infection. There seems to be a very prevalent but erroneous idea that the stronger the current the better the results. Reverse this opinion and you will be much nearer correct. Given a weak current (from 1 to 3 milliamperes) and

you get electrolytic action, the slow but sure decomposition of the tissue and its nutrient blood and lymphatic vessels with an assurance of nearly perfect cosmetic results. Given a strong current (10 to 15 milliamperes) and you get practically the same results as from the use of the actual cautery. You simply cauterize the superficial raised portion. You char the growth to the surface and prevent passage of the current thru the charred surface into the buried tissue. You cause more extensive inflammation and can never say with certainty what the cosmetic results will be.

Your patient is pretty well educated up to what constitutes good work these days, and just about one treatment from you, who still persist in using all the current a patient will endure, with the resultant, permanent, unsightly and unnecessary cicatrix that is almost as conspicuous as the blemish, will be a plenty.

As the susceptibilities of no two patients are the same, it all the more behooves you to begin with the weakest current and increase gradually to point of tolerance.

I have had during this year, two xanthomas, one cutaneous cornu, one case of ingrowing eye-lashes, one peculiar case of milium covering the whole upper eyelid, all most interesting to me, and each containing enough of the unusual to warrant brief descriptions.

Miss —, aged 12, presents herself for examination, and found a large protrusion covering entire right upper lid. Inspection showed numerous well defined white points. Palpation of the protuberance showed it soft and yielding, with numerous points hard and lumpy to the touch. No adhesion. Diagnosed as milium due to impaction of the sebaceous follicles, with partial hardening due to deposition of

lime salts. Proceeded to open the impacted ducts, using one milliampere of negative electrolysis, expelled the impacted sebum, applied hot cloths to allay the inflammation and made appointment for same day of following week. Upon examination at time of second visit, found the lid normal, no protrusion, but some slight redness and a few small white milia overlooked in first treatment. These I removed and upon examination some three weeks later, found the lid normal and natural as ever. What is unusual in this case is concentration. While milia are located about the eyes and on the cheek, they are isolated, one here and another there. In this case they were so intimately clustered together as to cause great distension of the lid, interference with its free movement and much worry and alarm to the child's parents. Happily the parents had her case presented before the sebum had completely hardened, or it would have been more difficult to expel the milium.

In January, Mrs. —, Grand Rapids, Mich., was sent to me for treatment. Examination showed the under lid of her left eye pretty thoroly covered with the almost indescribable, but never to be forgotten golden yellow, mottled protrusion, known as xanthoma. By inserting the needle into the tumorous fatty deposit until I had it practically tattooed, I hoped to break up the degenerated fatty material and have the ensuing crust formation carry it off. The best evidence that it did so lies in the fact that in June Mrs. F. —, Grand Rapids, presents herself for similar

treatment, having been sent by patient treated in January. I started with one milliampere in these cases and increased to one and one-half and finally to two milliamperes, as the parts became more tolerant of the current. Used the negative pole for attachment of needle and holder and one or two fingers in bowl of water into which had been placed positive electrode. By breaking current every time, needle is removed and making circuit when needle has been re-inserted, patient did not complain of the pain even when current had been increased to two milliamperes.

I find the positive current less painful, and where patients are over-sensitive have naevi or telangiectasis, I frequently use it. It is, however, much more destructive, the acid current being more likely to leave scar and should always be used with caution.

Had a recent case of naevus pigmentosus on a child's cheek, which I removed with the positive current in one treatment, because I was pretty sure I would not get her to take treatment if I used the negative current. However, if a patient will not object too strenuously, the negative current is always preferable. It is absolutely necessary to use the negative pole in the operation for the removal of hairs, as the only way to tell when a hair is destroyed, is by removing it from its follicle without traction. If the positive pole was used the hair would adhere more tightly, owing to the corroding effect of the current, and destroying hairs would be purely guesswork.

CANCER AND ITS TREATMENT.

BY GORDON G. BURDICK, M. D., CHICAGO.

The profession has been looking for some cure for this terrible disease for ages past. It was one of the first diseases that attracted the attention of the disciples of Æsculapius and many "cures" for cancer have been brought forth since, to flourish for a time, but invariably have been found worthless.

Before the era of surgery cancer had been treated with red-hot irons, hot lead, boiling oil, live steam, freezing, and the various caustic pastes containing arsenic, zinc or antimony. All of these methods have been tried and success has followed in a certain per cent. and has invoked considerable enthusiasm among their special advocates, the statement frequently appearing in print that some particular paste or method has destroyed the cancer root and branch. There is a disposition to ridicule these enthusiasts and not infrequently nowadays we hear the designation "quack" applied to people who do not show a disposition to follow the method of treatment that seems to prevail with the profession. Since my work for many years has brought to my laboratory hundreds of patients who have been treated by all known methods, I might be pardoned for saying that I have arrived at some definite conclusions regarding the various procedures used for the treatment of cancer. I have seen many cases that have apparently been cured by caustic pastes, some that have lived twenty-five years without recurrence, also others that have had the hot iron, live steam, and various other procedures used, and apparently without success. Recurrence after operation is so frequent and many cases are so hopeless that it is difficult to form a fair

estimate of the beneficial results following surgical procedures.

In order to be successful with any of these methods they must be thoroly carried out, absolutely destroying the diseased tissue, as half-hearted attempts have always been followed by disaster. The uncertainty of the crude methods, and the frightful suffering entailed upon the patient, caused the surgeons to supplement the caustic application with the clean, painless methods of the knife, the surgeon assuming that while he could not cure the disease, he could at least cut it out. The truth regarding the results following this method is extremely difficult to obtain, certain surgeons claiming as high as 40 per cent. of cures, while a great number of our old surgeons who have numbered their cases by hundreds, refuse absolutely to operate upon a case of cancer except from the standpoint of giving only temporary relief.

This is a strange position for some of our most skilful men to take if the results following the work of others are as favorable as they would have the profession believe. If the ordinary observer, however, will read the discussions at the various medical meetings where this subject has been under consideration, they will see frequent reference to the necessity of operating in the "pre" cancerous stage; in other words, if you remove any swelling or enlargement and call it cancer it is readily seen that favorable statistics are easily obtained, or, if you do as is done in one of our classical seats of medical learning, allow the operating surgeon to determine after the operation is performed whether a case should go

into the report, or into a pigeon hole of the desk. In spite of the favorable statistics from a few operators, and well advertised institutions, the conviction is growing that as a cure for cancer surgery is a failure. If it were a success you would not hear so much of the "pre" cancerous stage of carcinoma.

Medical electricians have always believed that some method would be found in which the current would play an important part, and it remained for Dr. G. Betton Massey, of Philadelphia, to devote his life to the subject and advise a way to popularize the procedure known as the zinc-mercury cataphoretic method of treating malignant tumors. It is also known as Massey's Cataphoresis.

Like all new things, the profession has been slow to adopt, or try the treatment, owing to the amount of special apparatus and the difficult technic necessary for its use. This, however, has been overcome to a certain extent, by the skill of manufacturers in supplying the necessary apparatus and the knowledge of their use taught by experts, who are able to point out the danger in the operation and improve the technic. It may be used successfully in the case of tumors situated in any part of the body, except in the neighborhood of large nerve trunks and vessels. It involves the use of a pure zinc electrode amalgamated with mercury. The patient is anesthetized and placed on a large, moist clay pad covering the entire back and extending down the thighs. This should be very thick and moistened with warm salt water. One hundred and ten volts direct current is applied, controlled through a suitable shunt controller, either of graphite, or better, of resistance wire of sufficient capacity to carry one ampere of current safely. The rheostat must be stepped so that the current

can be gradually turned on or off without producing a shock to the patient. A battery of eighty cells may be used. Special electrodes of pure zinc amalgamated with mercury are inserted in an incision at the outer border and at the base of the tumor, one or more being used in a tailed holder, depending upon the location of the tumor. The amount of current used depends upon the number and size of the electrodes, and varies from 35 m.a. to 150 m.a. to each electrode, the smaller using the lesser amount. The zinc electrodes should be polished with fine emery cloth, or a buff, before they are used, until the bright surface of the zinc is shown, then dipped into mercury for a minute, when an amalgam forms immediately. It is then removed and polished with a coarse towel, which leaves a thin film of mercury coating the zinc. If left too long in the mercury it will dissolve the zinc and ruin the electrode. The holder is attached to the positive pole of a galvanic battery, or the direct current, as may be available. As soon as the current is turned on it will be noticed that the tissue begins to turn white around the electrodes, and the longer they are allowed to remain the greater distance the paleness will extend. In practice it is better to allow the electrode to remain until the white border has reached one-eighth of an inch around it, and then place the electrode in a new location. This is continued until it is evident that the vitality of the tumor is destroyed. If the tumor is of the breast, it is rarely necessary to touch the glands in the axilla as they are invariably destroyed by the diffusion of the mercury and zinc salts through the tissues. This process converts the tumor into an odorless mass that separates without absorption in from eight to fifteen days, depending upon its size, leaving behind the most

beautiful granulations ever seen in a wound. I have never known a case where prompt and complete granulation has not taken place, nor have I ever had a case where recurrence has taken place within ten inches of the original tumor. Some of the cases have died several years after from cancer of the liver and colon with no symptom of trouble in the original wound. It takes from twenty minutes to two hours to destroy the ordinary run of tumors, depending upon the size of the base.

This operation is a formidable one, requiring skill, apparatus and considerable judgment but it is not beyond the reach of the general practitioner and, while it may never become popular with physicians, a minor application of the same principle should become popular as soon as the method is well known.

For small tumors as epitheliomata, suspicious moles, warts, pustular acne, furuncles, carbuncles, tubercular glands, etc., we find that we can use the same principle by having suitable electrodes shaped in such a manner as to be readily applied to the different growths met with in practice and we can use cocaine for local anesthesia and get good results by this method. With the electrodes shown we would use one m. a. of current for acne, two for boils and as high as five for carbuncles, and do the work in from two to twenty minutes. In acne it is sufficient to introduce the sharp-pointed electrode and allow one m. a. to pass so that a slight bleaching of the tissues is noticed, and then pass on to the next one. The object is not to destroy the tissues but to sterilize them by the colloidal metals and their resulting chlorides. A prompt cicatrization takes place with no more pitting than is usually the case, according to the size of the pustule. With

carbuncles one or more needles are introduced, dipping them first in cocaine or eucaine solution, using one m.a. of current to drive the cocaine into the tissues and then increasing it to fifteen or twenty m.a. until the parts are white. After the operation apply a green soap poultice, bathe daily and in eight days slough will separate without absorption. It must be borne in mind that the tissues for a considerable distance around the slough are thoroly sterilized and no infection can take place. It is saturated with this colloidal metal to its utmost limits, and, as is well known, it is one of the best antiseptics we have, as it is readily reduced by the chloride in the tissue to bichloride of mercury and chloride of zinc.

In treating an epithelioma the growth is perforated at the base with needle electrodes, and seven m. a. used until it is destroyed. For rodent and other ulcers, the flat shaped electrodes are used and the whole base whitened, and any recurrence destroyed later, as the granulations may suggest. The danger from this method is:

First, the use of impure electrodes contaminated with arsenic, causing constitutional effects.

Second, the destruction of some large blood vessel causing secondary hemorrhage.

Third, the destruction of some important nerve.

Fourth, carelessness in the use of the apparatus that may produce either shocks or frightful negative burns. This only occurs with massive cataphoresis, but any large felt electrode may be used in the minor operations without danger of a burn. This may be used by dentists to destroy the pulps of teeth by first using cocaine and following up with the com-

bined electrode. It is one of the most generally useful methods we have for all chronic indolent wounds or ulcers and will stimulate granulations where we can not succeed by any known device. I have repeatedly used it upon obstinate cases of lupus erythematosus very successfully.

Granulating tissue can be promptly destroyed and the surrounding tissues sterilized without pain or danger.

If physicians would take the trouble to become familiar with this method they would be astonished at the general usefulness of it as a therapeutic agent.

SOME VIBRATION THROBS.

BY DAVID A. STEVENS, M. D., CHICAGO.

A prominent physician remarked to me that vibration was grand for stimulating the lymph flow and the lymphatic glands, but he thought that was all it would do. While I disagree with him as to the limit he places upon the therapeutics of vibration, yet just study it over and see if he did not place vibratory therapeutics upon a very high plane. If we are able at all times to promote a free lymphatic circulation, certainly inflammation and congestion can not exist for a great period of time. I think that the lymphatic circulation and the circulation of the blood are so closely correlated that given one you have the other. If vibration will do what this doctor with his narrow vision claims it will, then it follows that the same treatment will at the same time free the circulation to the area treated, not only establish normal drainage but also give nutrition through the more perfect blood supply. Thus we begin to broaden out and yet there are fields of promise untouched. Unquestionably to accomplish the above is worth any man's effort. Such is the field of the masseur, perfect blood supply, perfect drainage. He can not hope to surpass this goal. We hear many doctors talk of scientific massage. Now if the doctor

was the masseur then there would be some color given to the claim of scientific. Let me ask what does a masseur know of the nervous system and its complex action through the sympathetics? What does he know about anatomy? Did he ever dissect? 'Tis foolish to prolong the questioning. He knows a set of movements that he has been told will do certain things. Even granting he can do his work well few patients can afford to have two doctors (?) at the same time. The doctor should do this work himself; he alone has the knowledge and ability to play upon the human mechanism and harmonize nature's forces.

This idea that has fastened itself upon the profession that it is lowering the dignity of the professional man to use his hands upon a patient, has opened the way for the osteopaths, masseurs, magnetic healers and others, until the dignified medical profession, wrapped in its cloak of scorn and contempt, wakes up to find patients gone to these people and, what is more important, patients cured by these same irregular practitioners. But Providence, ever kind to the shorn lamb, comes along with an invention which puts it in the doctor's own hands again to do

all of this work and still not descend to manual manipulations. Another neat equipment added to his office and satisfactory results with chronics attained.

But I have strayed somewhat while talking of massage, but massage is a closed chapter now, when every doctor puts in a vibrator and learns to use it properly. The masseurs, healers and such others of that ilk will have to seek other vocations for which they are more fitted. While I write frequently along these lines, mechanical and physiological therapeutics, yet let me be understood. I want to say with all the emphasis I can inject into the statement, no person should be allowed to do anything whatever toward curing diseased humanity (emergencies excepted) without a diploma from a reputable medical college.

Now that is out, I will proceed. The greatest field for vibration has not yet been spoken upon. I refer to the control of visceral life through the stimulation or inhibition of certain centers, plexuses or trunks of nerves, acting via the sympathetics. I believe, as a rule, few doctors are conversant with the sympathetic system. Byron Robinson has done much along the study of the sympathetics. Read his book upon this subject; it will give you new ideas.

In reading the list of diseases treated successfully in the vibrator clinics, you will notice many where there could seemingly be no connection with the disease and the points treated. Here it is sympathetic connection that was utilized. Just as an example we will consider the stomach. Other organs may as well be taken as they can be controlled in a similar manner. The area from the third to the tenth dorsal is the area for reaching the stomach. The specific area is the fourth and fifth dorsal vertebrae. Treatment is

given for two purposes, which may seem paradoxical, that is, to remove conditions that may cause stomach disease, such as deviations of spinal vertebrae, ligamentous thickening, contracted spinal muscles, and ribs that are subluxated; all of these, or any one of which will by pressure impede the flow of impulses along the nerves, and thus make a diseased condition of the stomach. On the other hand, there may be no lesions of this kind and yet we work upon the same area and reach the stomach.

Frequently doctors laugh at the idea of reaching the sympathetic nerves through work along the spine, saying we reach only sensory nerves. The intercostal nerves are in direct connection with the sympathetic through the rami communicans of each spinal segment. Most of the work must reach the stomach through the solar plexus, hence the vagi are to be treated. The left vagus will cause the pylorus to relax, if inhibited, this may be done along its course in the anterior of neck or at the third and fourth dorsal upon the left side. This will relieve nausea, turn patient on right side and vibrate deep over stomach anteriorly to empty stomach into duodenum.

In gastritis relax the spinal muscles, give percussion stroke over the angle of ribs to raise ribs and relax intercostal muscles. Vaso-motor activity is aroused by spinal treatment of the splanchnic area through the solar plexus. This may be done upon anterior surface also, direct. Inhibit sixth and seventh dorsal to relax cardiac orifice. Deep pressure over solar plexus helps to absorb gas.

My object is not to attempt to give the technic for all stomach diseases, but to call your attention to the fact that all of these viscera have direct nervous connection with points that may be treated

and visceral life controlled. I hope we are at the point where we may assume every doctor recognizes the value of vibration

and have case reports and technic in the future rather than a lame attempt like the above to tell why vibration is good.

STOMACH DISEASES.

BY WALTER B. METCALF, M. D., CHICAGO.

Stomach diseases are divided into two great classes, functional and organic. I believe that in a general way, we speak oftener of, read more about, write more on, diagnose oftener and in fact know more about the organic diseases of the stomach, than we do the functional disturbances, which constitute a no mean number of our stomach affections.

There are a great many stomach cases applying for treatment, which have no demonstrable anatomical lesion in that organ. These are called neuroses or functional disturbances. Our knowledge of them is principally descriptive and the etiology is far from being understood. The time has arrived for a closer study of these conditions. That the neuroses play a great part in the etiology of many of our diseases, must be accepted as a fact.

The nutrition of the neurons and their influence as an etiological factor must be reckoned with. In the condition of the neuron with its neurine, I believe lies the balance wheel between what is known as health and disease.

The stomach is the center of a far-reaching plexus, whose cerebral and sympathetic fibers have many anastomoses with the resulting, crossing and mingling of both stimulating and inhibitory impulses. It will be easily understood that to bring order out of this chaos is accomplished with difficulties. Until now our knowledge of the etiology of these functional disturbances has been so limited and vague that conjecture and hypothesis

have played an important part, while the actual clinical facts upon which our pathology has been based, fills only a very small space.

The functional neuroses occur rarely as distinct independent diseases, but are usually found in groups or they appear closely one after another, during the progress of the malady, passing before us like a panorama with ever-changing scenes.

These affections occur chiefly among women between 20 and 45 years of age. They are very commonly associated or connected with disturbed menstrual functions, anemia, constipation, worry and anxiety. Some of them have severe disturbances of nutrition. They are emaciated with faded, pale complexions, thru which the veins may readily be seen. They have languid eyes, a weak voice, feeble movement and a sluggish gait. Some are even bedridden. We may discover the so-called nervous temperament, headaches of various locations and character, disinclinations toward mental exertion, depression, mental sluggishness, poor memory, absent mindedness, vertigo, neuralgias, and paræsthesia, vesical weakness, pupillary differences, evidence of spinal irritation and intercostal neuralgias.

In the severe mental exertion of business men and in women who have an absolute or relative excess of social duties or pleasures, we frequently see cases of periodical neuroses, which are due to the

periodical increase of these causes. Inasmuch as the amount of work or pleasure is greater at some times and less at others, this increase or diminution is accompanied by a corresponding increase or lessening or even disappearance of the stomach symptoms. While, on the other hand, we are often astonished to see people enter our offices who are apparently healthy and vigorous and with red cheeks, yet they complain of a host of gastric disturbances, nervous and otherwise. I have often been surprised at the real or apparent high state of nourishment of the great majority of cases who apply for treatment of their stomachs and this leads me to the point which I wish to make, viz., that a very large percentage of the gastric disturbances are functional and that our line of treatment must be directed to the nervous system and this must be done by increas-

ing the nourishment and functions of the neurons. Any treatment that fails to incorporate in it this line of procedure will fail of obtaining the best possible results. The gastric nervous center must be called into action either directly or reflexly.

Following out the theory as laid down by Dr. F. H. DeVaux, that the action and nutrition of the neuron is inhibited by the presence of a toxin circulating in the blood, I began the use of his antitoxin in the treatment of these functional gastric disturbances, with very marked success. Under treatment the great array of clinical symptoms soon vanish, the patient's digestion improves, the red blood corpuscles are increased, the emaciated puts on flesh and gain in strength. The great cloud that has been depressing them is lifted. They become cheerful and happy.

100 STATE STREET.

COMPULSORY NOTIFICATION IN TUBERCULOSIS.

Robertson (*The Edinburgh Medical Journal*), mentions the following reasons for the compulsory notification of cases of pulmonary tuberculosis:

1. The private medical attendant in nine case out of ten has to concern himself with the medical treatment of the case, as distinguished from the prevention of spread of the disease; and at the present time, where there is no notification, there is, one finds, in practice very little attention paid to the steps which should be taken in preventing the patient from spreading the disease to others. Where notification is generally adopted, it will be possible to get in the larger districts skilled persons to devote their time to ensuring, within reasonable limits, that

the infectious person carries out the very simple precautions that are known to be necessary to prevent the disease spreading.

2. By getting to know in a systematic manner all cases of tuberculosis of the lung, statistics will in time accumulate on the important points in the etiology of the disease. At the present time, for instance, our figures, based on inquiries made after death, are of little value in demonstrating the conditions which obtained at an early stage of the disease.

3. Such notification will enable disinfection and cleaning to be looked after in a systematic and regular fashion.

4. It will draw particular attention to the fact that the disease may be spread if the sufferer is not careful.

EDITORIAL

The fourth annual meeting of the American Progressive Therapeutic Society will be held in Chicago during the first week in December. We are promised the co-operation of the local societies and we expect to have a large meeting. Members, or any person wishing to read papers before the society, will kindly correspond with the secretary, Dr. W. F. Nutt, 26 Van Buren street, Chicago, or the president, Dr. Otto Juettner, Cincinnati, Ohio.

Doctors are at swords' point in Paris over the question of appendicitis. The grape season has arrived and a controversy has arisen as to whether or not this fruit causes appendicitis. Dr. Metchinkoff, the celebrated bacteriologist of the Pasteur Institute, made the following statement:

"I have never in all my experience discovered a grape seed in the appendix. I do not think that they cause appendicitis, but grapes themselves are an unsafe food and I always recommend parents not to give them to their children. The skin of the grape is covered with dust, which often contains disease germs and tiny worms, and the latter often set up in intestinal inflammation which results in appendicitis.

The astonishing report comes from Paris that over 30,000 die of cancer yearly in France. The victims in Paris alone reach 4,000. Instead of diminishing, cases of cancer are increasing, and whereas formerly the age at which the victim was attacked by the frightful malady was usually after 40, nowadays young people of 25 and 30 are afflicted; moreover, cancer now attacks all organs of the body, whereas formerly it was limited to two or three at the utmost.

Such are the facts which Dr. Borrell called to the attention of the Academy of Medicine at the last meeting. Dr. Borrell in his communication to the academy, developed a new theory as to the transmission of cancer, in many cases communicated thru our food.

It appears that the cancer worm, if such it may be called, lays its eggs in refuse, which in the country districts lies often not far from the springs from which the water for drinking and gardening purposes is drawn. This water mixed with food or drink, is contaminated, the cancer microbe introduced into the system lodges in certain corners of the body and sets up a cancerous growth.

Dr. William Ewart, of London, a distinguished member of the British Medical Association, announces that he has discovered the secret of Chicago's supremacy in medical science. It is due to concentration and co-operation. It is only by research work that the progress is attained in science, and it is when the workers in the laboratories understand that the rank and file of the medical profession are scientifically alert, keenly appreciative of each step in the conquest of medical science over disease that the best research work is done. The great colonies of doctors in the immense office buildings downtown supply the key, I believe, to Chicago's supremacy in medicine and surgery. We have nothing at all like it in London, tho we have more than twice the population of Chicago.

I have found here many notable institutions apart from the great university laboratories, which have been doing invaluable work for humanity. One of these is the Tuberculosis Institute, where I found a most wonderfully thoro system of registration, designed to restrict the zone of tubercular disease and finally conquer it. I look for great scientific discoveries from Chicago medical men. It will not be long before permanent cures for malignant ulcers, and perhaps for cancers and consumption, will be announced by Chicago doctors.

I. C. McElwee, M. D., says that in the process of evolution of the tubercular sanatorium it has come to be an acknowledged fact that altitude does not play the all important part in the cure of phthisis that was so long ascribed to it, although it is not to be in anywise deprecated or ignored, yet it is not an absolute essential, for, instances are abundant

where the most brilliant results are being obtained at the sea level, and in one place, a considerable distance below it; the most notable of which are in New York City and Philadelphia. In these cities cures are being made daily with the patients in cots on the roofs or in the upper stories of houses with all the windows open, with the smoke and grime, unavoidably incident to the city notwithstanding. The first notable change for the better in these patients that become residents in a sanatorium, is the disappearance of the fever. Following that the cough, and coincidentally, the disappearance of the bacilli from the sputum, and the expectoration itself and the slight hemorrhages, if there have been any. The weight then increases more or less rapidly according to the weather, being most noticeable in the cold weather, and the colder the weather, the more weight taken on. The barometer shows that the air then is the most dense and is dryer than in any other condition, and all this means oxygen and this means exhilarated function and molecular activity, which is a condition entirely inimical to the bacilli and they die, being as unwelcome in this soil as Kansas Carrie would be at the Veiled Prophet's ball with her hatchet. The chief essential, the great characteristic of this plan of treatment is the enforced and invariable life in the open air. Day and night, winter and summer, wet or dry, hot or cold, clement or inclement; sun or rain, no breath of air must be taken that bears a suspicion of having been ever breathed before. All other aspects of the treatment are considerations of detail merely. They are of importance or not in proportion to how much they contribute to the bodily comfort of the patient and preserve his vital energy. Because the system of the

patient pays a large percentage of interest on daily balances, when no checks are drawn against the savings account, but on the other hand, charges usurious rates on any draft that may be made on the original deposit, for whatever reason. This soon becomes apparent to the most giddy subject (who as you know are people who range from 15 to 35 years, with the great majority of them being in the near neighborhood of 20) and they are quite willing to economize on vital energy, when they have been in the place a fortnight. The most delightfully striking feature of the patients as a class that presented itself to us, when we first entered a sanatorium, was the absence of the characteristic facies of phthisis. When our carriage first entered the grounds of the Trudeau Sanatorium we met a couple of lasses about 18 years of age, bare headed and bare armed to the elbows. Their cheeks were as ruddy as bell-flower apples and their eyes were as bright and sparkling as if they had just gotten money from home. Their gait was decided and elastic and went with a swing that denoted strength and a freedom from restraint of any kind. To our great surprise, the driver told us that these were patients in the sanatorium, and greater still our surprise when we found these characteristics were true of the entire two or three hundred patients (save the few, ten or eleven who were sick abed in the infirmary), and all the ambulant patients spoke of their improvement and ultimate cure with the utmost assurance and in the most matter-of-course tone of voice. The time required to complete a cure is from two months to two years, according to the degree of pulmonary involvement and the recuperative power of the patient. The only patient that we saw whose record showed a cure in two months, was a man,

aged 32, in the Rutland, Mass., hospital, who had submitted to a hypodermic of 5 cc. of tuberculine as a diagnostic measure on his first admission to the institution. As this procedure was not a routine and was only practiced with the consent of the patient, which was often denied, thru ignorant fear, no satisfactory data could be determined on this point. The Trudeau Sanatorium consisted of some thirty-two detached cottages, scattered in a desultory manner over the eastern slope of a big mountain and accommodated in the neighborhood of 250 patients.

Dr. W. P. Rasbin calls attention to the prejudice existing against the use of such physical agents as electricity in the treatment of disease, which he deplores, and urges the importance of combining physical agents with drugs in suitable cases. He says:

"Drug prescribing and physical therapeutics should go hand in hand. *Neither* are absolute specific in every disease—and indeed are in but very few—but used intelligently in conjunction with each other, the physician is far better equipped to cope successfully with a much larger number of diseased conditions. To illustrate: All well-informed physicians of today will admit that *massage* (either by hand or by the intelligent application of many of the vibratory machines on the market), hydro-therapeutics and electricity in conjunction with forced feeding and the administration of such drugs as iron, malt, strychnine, aloes, etc., as indicated, accomplish far better and more permanent results than the single administration of drugs alone. There is a well-recognized system in vogue among the profession which abundantly proves, and has proven, this. Again the true physi-

cian can best, of all other men, afford to be altruistic. Our great Master himself went about doing good, and though divine as He was, as well as human, He did not hesitate to unite the *material* with the spiritual and physical in healing disease, for He anointed the eyes of the blind, gave the helping hand to raise the cripple, and even the dead. I would urge a fuller and more equitable recognition by the profession at large of the long list of really useful physical agents that are ready to help us in doing our life work the very best."

While the open-air treatment of tuberculosis is generally recognized we occasionally find an institution where this most important feature is lost sight of. In an editorial (*Medical Sentinel*, July, 1906) attention is called to the Phipps Institute, of Philadelphia, ostensibly for the study, treatment and prevention of tuberculosis, where the fresh-air feature is lost sight of, for the simple reason that none is to be had where it is located. The author urges the importance of erecting such buildings, not in cities, where the expense of fireproof construction has to be considered, while fresh air is out of the question, but rather in salubrious locations in the country where cheapness of construction of buildings, and land, is possible without loss in general excellence, and in which institutions the fresh-air treatment can be fully carried out. Commenting on the completeness which characterizes the study of tuberculosis in the above institute the author says:

"While study of individual cases has its place, and minute scrutiny of causes and course of disease, yet it would seem that the management of this institution is an example to the rest of the world as to

how not to do it. Hospitals for the care of the consumptives erected on expensive city lots, built of such costly materials as the fire ordinances of every well regulated city require, are not nearly as well adapted for such use as cheaper buildings on cheaper lands in the country, where quiet, fine air, clear breezes and country surroundings are to be had. These blessings, coupled with expert attendance, good food and proper discipline, will rob tuberculosis of its terrors, and work a thousand fold more good to the poor and ailing, than the expensive institutes such as that which we have described."

Dr. G. G. Burdick calls attention to the antagonism expressed by the conservative physicians toward this branch of medical and surgical treatment. He says that 60 per cent. of the work in this line is due to the numerous wrecks turned out of our operating rooms, broken in spirit, body and purse; that the success of physiological therapy in restoring these so-called incurable nervous wrecks to health has led physicians to take up the treatment with little knowledge of what is demanded to bring success. To be successful requires harder study and more special knowledge than was ever dreamed of in medicine.

Success in physiological therapy demands skill in diagnosis. What other men discover he must verify by his own labors. He must be able to distinguish tuberculosis from syphilis, as well as those cases where a tubercular infection is grafted on a syphilitic sore. These patients have usually been drugged till their stomachs rebel at the very thought of treatment. There is a lack of nervous tone, considerable physical disability and a greatly enfeebled stomach.

The stomach requires attention first;

food must be suitable, sufficient and well digested. These cases invariably show a marked lack of tone in the abdominal organs, a dilated stomach and a flabby abdominal wall. For this reason we treat a tubercular ulcer, located in one of the extremities, by a sinusoidal massage of the muscles of the abdomen, and upper extremities, one electrode being placed at the nape of the neck and the other moved about the abdomen. This treatment causes the muscles to move at least twenty-five times during the treatment. This is repeated daily till the control of the muscles of the abdomen is secured. A weight is placed on the abdomen and the patient compelled to move it from place to place by the action of the muscles alone. Next a rubber ball is placed on the abdomen and the patient, by action of the abdominal muscles, is required to throw the ball and catch it in his hands, for five minutes at a time without exhaustion. After this stage the patients are taught to grasp the stomach between the diaphragm and the abdominal muscles and, drinking a pint of water, shake the stomach and squeeze the contents into the duodenum. By this, as well as exercise of the general system, the patient shows marked improvement; can sleep, eat and take an interest in his surroundings. With the improvement in the general health there is improvement in the ulcer. We are now ready to treat the ulcer with the x ray, if it is proved to be tubercular; or if mixed with streptococci, with liberal doses of streptolytic serum injected twice a week. External ulcers are given local feeding with beef extract, rendered antiseptic, to hurry up the cure. If we wish to destroy tissue we use a zinc electrode amalgamated with mercury, connected with the positive pole of a galvanic battery, driving the

zinc and mercury into the tissues. After ten days the slough separates, leaving healthy granulations behind it, with a sterile zone extending for an inch around the field of operation. In a few weeks the wound heals with a flexible cicatrix.

The physiological therapist must learn that (1) a positive current is sedative; that (2) a negative current is stimulant; that (3) a current always disintegrates a fluid conductor thru which it passes, and in an exact ratio to its ampere value; that (4) motion takes place in both directions within a conductor; that (5) hydrogen is liberated and gathers at the negative pole; that (6) oxygen gathers at the positive pole; that (7) a broken circuit or a change in potential will produce muscular contraction; that (8) all metallic elements are disintegrated, their ions being driven from the positive to the negative pole; and (9) the human body may become a condenser, and can be charged and discharged at will.

Let us conceive that electricity is a motion; that a positive current is a right-handed revolution of the corpuscles within the atom, and the negative current is the reverse of this. The number of turns made by the corpuscles in a second is the electromotive force, while the number of corpuscles that turn is the ampere flow. With low potential currents, chemical effects are noted, while with high the mechanical effect predominates. With the condenser, or oscillatory discharge, including the high frequency currents, the effect is physiological. With these principles in mind treatment is easy. Take a case of chronic pyosalpinx, with adhesions and exudations, giving the impression of a hard pelvic floor. Here we use the galvanic current, with a large, well protected copper electrode connected

with the positive pole, and a large clay negative electrode under the back or over the abdomen. We would use about 100 m. a. of current three times a week, driving the copper ions into and through the dense mass within the pelvis. With this a negative vaginal electrode is employed. We get the double effect of the local asepsis from the colloidal copper, and at the same time make the tissues strongly alkaline and hence more soluble. After a few treatments we find the uterus movable and painless, and we want a mechanical and physiological effect from our treatment; so we connect the vaginal electrode with one pole of the condenser, and after carefully insulating the patient, the condensers are allowed to discharge slowly through a spark-gap of about one inch. With each passing spark the body experiences an atomic massage, and a treatment of ten minutes daily removes all indurations and adhesions, and the disease is cured.

We have no text-book on electro-therapeutics that more than scratches the surface of the subject. It is needless to say that the only road to success is to make it a specialty. The general practitioner, working sixteen hours a day, can not do this. He wastes his money in machinery which he is not called upon to use often enough to keep the bearings oiled and the dust off.

Success with physiological therapeutics means an accurate diagnosis and a correct theory of the pathological condition present; a complete knowledge of the different forms of electrical modalities, and the methods of developing their chemical, mechanical or physiological effects. It would seem very easy to acquire this knowledge, but in practice nothing is harder or requires more painstaking re-

search, as few of the really successful electro-therapeutists have written books upon the subject, and their ideas are scattered in papers read at conventions and published in various scientific journals not ordinarily within the reach of physicians.

The class of cases handled by physiological therapeutics are: First, skin diseases, in which the x ray has been found almost a specific; second, malignant diseases, by both the x ray and the zinc-mercury cataphoretic process; third, nerve degeneration, causing atrophy of muscles and nerves; fourth, pelvic diseases of women, who have been either unsuccessfully operated upon, or who refuse operation; fifth, ptosis of abdomen, dilated stomach, and prolapse of the pelvic floor; sixth, urethral strictures and their various complications; seventh, neuralgias, neuritis and pain of doubtful origin, classed usually under the head of neurasthenics.

The x ray has been found very reliable in eczema, acne, psoriasis, mycosis, fungoids, hyperephidrosis, lupus vulgaris and epithelioma. With this classification success can be predicted and failures are rare.

The x ray is slowly but surely winning its way in the treatment of both sarcoma and carcinoma, and as the technic is being improved and cases being treated earlier, the percentage of successes is gradually climbing the scale. The indications are strong that we shall eventually find it the most successful method of reaching this numerous class of sufferers.

In the nerve degeneration we have a potent remedy in the high frequency current, supplemented with suitable hygiene, calisthenics and drug medication. If the function can not be restored in certain cases, at least the progress of the disease may be arrested, the power and strength

of the muscles may be restored, and wonderful progress made in building up their bodily health.

In pelvic disease some of the greatest successes have been made in physiological therapeutics. By suitable combinations of modalities we are enabled to throw within and thru the inflamed tissue colloidal copper, which is one of the most powerful antiseptics and astringents known. We can sterilize great masses of tissue and do it without pain or danger, if a certain amount of brains is used with the treatment. We can render the mass acid or alkaline at will, and can stimulate every muscular fiber within and without the mass by means of our oscillatory currents, promoting absorption. For instance, let us take a bad case of leucorrhea, with a chronic endocervicitis. We drive large quantities of colloidal copper into the tissue a few times and bring about a perfect cure. The muscles of the vagina can be developed by means of the bipolar electrode and interrupted currents until the patient has excellent control of them, doing away with the symptoms of prolapse. We can take fistula of the anus, and where it is possible to follow the entire sinus with a copper wire, we can drive the colloidal copper into the surrounding tissue and completely sterilize the tract and surrounding tissue, allowing cicatrization to take place. We can cut a stricture of the urethra with a negative electrode one inch in length in five minutes, without pain, hemorrhage or discomfort. We can destroy a Bartholinian gland by means of a zinc electrode amalgamated with mercury under local anesthesia or, if desired, sterilize it by means of the colloidal copper. We can destroy granulations and stop hemorrhage from the uterus where it depends upon polypi or granulation, and

do it without pain or distress. The effect is not temporary, but is as effective and permanent as any other method of treatment. In ptosis of the abdominal contents and muscles, as stated elsewhere in the paper, this condition can be completely relieved. For pain we find some of the numerous modalities are certain to give relief, except in those rare cases where it is of central origin, and even in this class of cases many things are possible if we have a sufficient number of cases at hand for further experimental work, as a suitable high frequency may be used that would produce a profound sleep.

DOSOMETRY OF THE ROENTGEN RAYS.

No research about the action of the Roentgen rays can have a scientific basis if it does not take into account, with the most absolute precision, the quality of the radiations used and the quantity of rays which are absorbed by the substances or the subject under examination.

The Crookes tube furnishes the data we seek; the soft tube having little penetrating powers, is suitable for diseases on the surface of the skin, while rays from a hard tube are suitable for deep-seated lesions. With the osmo-regulators the hardness or softness of the tube may be regulated so as to produce rays of much or little penetrating power. To recognize the grade of penetration of the Roentgen rays, the radio-chronometer is used, which allows the classification of all rays emanating from a Crookes tube in a scale of twelve different gradations.

The chromo-radiometer of Holzknacht measures the quantity of rays absorbed; 1 unit H meaning No. 1 of the scale of

control of the Holz knecht apparatus. In measuring the rays the distance of the superficies from the focus of origin of the x rays must be taken, and the rays must strike the surface in a perpendicular direction.

Here, then, to sum up, is how the dosimetry data referring to an experiment with Roentgen rays should be given.

"I have exposed to the Roentgen rays a sample of virus rabicus, etc., etc., contained in a plate 5 cm. diameter, spread uniformly over it in a stratum of 12 mm. in thickness. The said substance has been exposed to rays of penetration No. 7 Benoist, directed normally on its surface, and has absorbed a mass quantity of rays equal to 24 units H, administered without interruption in 168 minutes; or, has absorbed fractionally a total dose of 24 H in twelve daily exposures of fourteen minutes, during which it absorbed each time 2 units H."—*Journal of Advanced Therapeutics*, June, 1906.

ACTION ON BACTERIA OF ELECTRICAL DISCHARGES OF HIGH POTENTIAL AND RAPID FREQUENCY.

Interesting experiments in this direction have been made by A. G. Foulerton and A. M. Kellar. The current obtained from the electric light supply was first transformed into a rapidly oscillating current of very high potential, and then into an oscillatory discharge of rapid frequency by means of a condenser and spark-gap. The bacteria were exposed to the action of the discharger while suspended in distilled water contained in test-tubes. The authors note that in all

the experiments in which a decided germicidal effect was observed, it appeared that this was due entirely to the action of substances formed as the result of electrical action on the atmosphere in which the discharge occurred; and it appeared that under the time conditions of the experiments the electrical force employed was not capable of exercising any injurious action on the bacteria tested. And it is probable that when in medical practice cases of lupus and certain other cases in which there is an exposed ulcerated surface are treated by "high-frequency" discharges, the results produced are due entirely to the action on bacteria of nitrous and nitric acids formed in the neighboring air. And from a therapeutic point of view the use of high-frequency discharges in such cases must be looked upon mainly as an efficient method for bringing germicidal substances in a nascent and very active condition into contact with the bacteria present in the lesion exposed to the action of the discharge.—*Medical Record*.

ROENTGEN DIAGNOSIS OF DISEASES OF THE LUNGS.

Pfahler employs the instantaneous Roentgenographic method, and finds its greatest usefulness in the diagnosis of tuberculosis. Other diseases interpreted by this method are pulmonary abscess, pulmonary gangrene, pneumonia, emphysema, collapse of the lungs (only when large area is involved), thickening of the pleura, pleural effusion, pneumothorax, hydro-pneumothorax, hemothorax, consolidation and pleural effusion combined and subphrenic abscess.

THE D'ARSONVAL AND OTHER HIGH FREQUENCY CURRENTS; WHAT THEY ARE AND WHAT THEY WILL DO.

H. G. Piffard describes the physics of these currents, which are three in number (D'Arsonval), the derived or shunt current, the autoconduction and the autocondensation current, the essential feature connected with their conduction being (1) a suitable capacity, such as Leyden jars, or a flat condenser and (2) a solenoid or a spiral. The general effects of these currents on the human organism are described. The author considers the high frequency currents more efficient owing to their higher amperage. The general indications for their employment are conditions characterized by impaired metabolism. Contraindications are acute visceral inflammations, eruptive and continued fevers, marked cardiac or vascular disorders, and advanced pulmonary tuberculosis. A limitation to their use is that the patient must be able to attend on the physician, as the apparatus is not easily transported. In early tuberculosis these currents have proved to be extremely useful. Weight increases, appetite improves, cough lessens, and night sweats cease. Other diseases in which beneficial results have been obtained are gastric dilatation and locomotor ataxia. Locally obstinate acnes, localized eczemas, genital pruritus, lichen planus, hemorrhoids, and fissures have all been markedly relieved. Malignant or semi-malignant lesions of the skin, such as epithelioma, lupus, and sarcoma have, in many instances, been destroyed by the caustic sparks from a metallic electrode connected to one terminal of a coil transformer, the other terminal being grounded or connected with the patient. As a

means of aborting furuncles, the author knows of nothing better than the plan just referred to.—*Medical Record*.

FACIAL PARALYSIS.

BY FRANCIS B. BISHOP, M.D., WASHINGTON,
D. C.

Every textbook on diseases of the nervous system describes this disorder. It may be due to lesion of any part of the seventh nerve, and this may extend so as to cause paralysis of other parts of the body.

Bell's paralysis is liable to come on suddenly and be complete in a few hours or days. This disease is a neuritis, due to toxic influence. The writer agrees with Oppenheim that it is caused by disease of the middle ear.

In treating these cases we must find the cause, if possible, and remove it, then begin the electrical treatment without delay. A mild continuous current is applied for fifteen or twenty minutes every day or every other day. If the case is seen early before the muscles begin to waste, three or four times a week is usually often enough; if the muscles are already wasting, I treat them every day, using a large pad electrode as high up on the back of the neck as possible. I connect this with the positive pole, while a small negative about one inch in diameter is pushed against the exit of the nerve and held firmly in position. A current of four or five ma. is turned on and allowed to pass five to ten minutes, when this is replaced by a large flexible electrode that covers all the muscles of the face; through this a current of from eight to ten ma. is allowed to pass for five to ten minutes, testing each day very cautiously the conditions of the muscles, and watching for the muscles that show the

first sign of normal reaction or volitional movement. These muscles are carefully avoided in the future treatment of the case until the others show signs of returning normal condition.

As soon as the peripheral organs of the motor nerves will respond to the inductive current, this current should be used, at first very gently, and at no time should a muscle be held in contraction, but should be stimulated by an interrupting electrode, and as much time given between each contraction as is given to the contraction itself—*Journal of Progressive Therapeutics*, June, 1906.

GALVANISM FOR CHRONIC CONSTIPATION.

Peyser proposes to deal with idiopathic constipation, i. e., constipation not dependent upon any other pathologic condition (Gallard's *South. Med.*, June, 1906). The faradic current by itself is without avail in his experience, but is beneficial in strengthening the abdominal muscles of large, flabby abdomens. He uses the galvanic current and while not entirely successful in giving complete relief from costiveness and its results, there has not been an absolute failure in any of his cases treated with the electric (galvanic) injection. His plan is as follows: "A soft rubber rectal tube, in which is placed a metallic conductor, is passed into the rectum coiling in ampulla being prevented if possible. The metallic conductor is attached to the positive pole, the tube is connected with the tube of the fountain syringe, which contains saline solution. A large pad electrode well moistened with saline solution or well soaped is attached to the negative pole. While the solution is flowing or after the syringe is emptied the current is turned on and gradually

increased in strength until 15 m. a. or 20 m. a. are passing or until the patient complains of burning at the negative pole. There should be no sensation at positive pole. The solution in the bowel acts as one of the terminals, thus spreading the current over a large extent of surface, and permitting more current to be used. Similarly, the large pad permits increased amperage." Evacuation is the result in a varying period from at once to several hours. Sometimes without, more often with fecal matter. Evacuation next morning is the rule. That the electricity and not the saline solution is the cause of the evacuation has been proven many times. Six to ten treatments are requisite for a complete cure, first administered every day then at longer periods. Strength of current governed by sensations of patients, generally 12 to 20 m. a. Length of treatment 15 to 20 minutes. If bowels are very torpid the interrupted current 8 to 16 interruptions per minute, are given for the last five minutes of treatment.—*Carolina Med. Jour.*, July, 1906.

HIGH FREQUENCY CURRENTS IN SKIN DISEASES.

The late Dr. Charles W. Allen, of New York, in a paper on high frequency currents in skin diseases, stated that currents of a high voltage and high frequency were of decided benefit in treating a large number of dermatological diseases. High frequency sparks had not only a surface, but a penetrating effect. They were useful in diagnosis, detecting disease in apparently healthy skin, and sought out, as well as destroyed, remnants and recurrences in scar-tissue. Epithelioma, lupus, lupus-erythematosus, and lichen planus were among the diseases most benefited. In pruritic and painful affections the

spark was of decided utility, and in the destruction of moles it acted promptly and painlessly. The author therefore considered it a great prophylactic measure against malignant degeneration in such growths.—*Medical Record*.

THE VALUE OF X RAY EXAMINATION FOR THE EARLY DIAGNOSIS OF APICAL TUBERCULOSIS OF THE LUNGS.

Adam (*Berlin Klinische Wochen.*, June 11, 1906).—All cases in which physical examination showed difference in precussion note, or changes of breathing, etc., more or less diffuse or circumscribed shadows were demonstrated by the x ray. This was also present in cases in which catarrhal symptoms were found on physical examination and also in some cases in which the physical findings were negative entirely. He concludes that in those cases in which there is infiltration the conditions were discovered earlier with the x ray than by means of physical examination. The second lot of cases in which there was a chronic infiltrating process without catarrhal symptoms, the diagnosis could be made earlier by x ray than by physical examination. Adams concedes it would take more observations to determine by x ray the kind of pathological process present.—*Interstate Med. Jour.*, August, 1906.

ROENTGEN RAY TECHNIC IN THORACIC ANEURISMS.

Baetjer uses the fluoroscope method, and for permanent records makes a Roentgenograph of the lesion. Technic for examination: Tube at level of third rib, patient in sitting position with back to tube, the latter twenty to twenty-four inches away. The next position is with

the patient facing the tube at same level and distance. Next the transverse illumination is given, the latter to determine if a tumor noted has attachments in front or behind. Abnormal shadows noted to the right or left of the sternum may be due to: New growths, enlarged glands, displaced aorta, dilatation of the aorta or aneurism of the aorta.

"In new growths and glandular enlargement the history of the case is important and then, too, the shadow cast is more dense than one cast by an aneurism. Absence of pulsation is of value, but can not always be relied upon, as frequently we get a transmitted pulsation, which can scarcely be distinguished from that of an aneurism. The two distinguishing features, however, are that the shadow is darker and the edges are more hazy and irregular. Displaced aorta can be ruled out by examining spine and chest to see that there are no abnormalities. In dilatation of the aorta distinct pulsation of the shadow can be seen, but the diagnostic point is that the shadow disappears between pulsations because the aorta contracts in this condition and its shadow lies within that cast by the sternum and spine."

Diffuse aneurisms, where the aorta is uniformly enlarged, are marked by a broad shadow extending down along the sternum, generally on both sides the shadow persists between pulsations.

The author recited a number of cases diagnosed as asthma, intercostal neuralgia, etc., which the fluoroscope proved definitely to be due to aneurism.

THE PATHOLOGICAL AND PHYSIOLOGICAL EFFECTS OF THE ROENTGEN RAYS UPON THE TISSUES AND BLOOD.

Rudis-Jacinsky recites his experiments on lower animals and describes the effects

of the rays on the skin, viscera and blood. He warns against the dangers of toxæmia in the treatment of large growths, proper drainage being essential in these cases.

ROENTGENOGRAPHY IN DISEASES OF THE STOMACH AND INTESTINES.

Hulst emphasizes the frequency of splanchnoptosis (Glenard's disease) and the difficulty in its detection, especially in the obese. By means of the Bismuth meal method, diagnosis of this common disease (with its trend of nervous symptoms, abnormalities in size of stomach, etc.) may now be readily undertaken with Roentgen rays. Dr. Hulst advocates Roentgenography as originally practiced by Professor Rieder, of Munich. This method has, however, now been abandoned by many European specialists in favor of fluoroscopy—the latter being more satisfactory and offering more diagnostic value. Dr. Holzknacht, of Vienna, claims that his technic (fluoroscopy) will, in many cases, permit diagnosis of stenosis of any part of the intestinal tract (so valuable in the early diagnosis of cancer), enlargement and abnormalities of various kinds and also give insight into the peristalsis and motility of the stomach.

DEVELOPMENT OF THE ELBOW.

Hickey observes that fractures in this locality are often difficult to diagnose even with the aid of the Roentgen ray, and the development of the bones constituting the joint must always be borne in mind before deciding on the diagnosis of fracture. In the specimen exhibited it was shown that the various centers unite at different ages in different per-

sons, the olecranon being still separated at the fifteenth to the eighteenth year in some cases. An excellent rule in all suspected fracture cases is to radiograph the *well side* in addition to the injured joints for comparison.

ROENTGEN RAY TECHNIC IN KELOIDS.

Barnum believes keloids to be especially susceptible to the Roentgen ray and questions if there are any cases not due to trauma.

Technic: An apparatus generating "abundant rays," high tube at least six inches in diameter, distance fifteen to twenty inches from lesion. "The variation in distance from the tumor depends upon its thickness. The deeper the affected tissue, the higher the tube, the greater the distance from the tumor and the longer the exposure. Exposure fifteen to twenty-five minutes on alternate days for eight to ten treatments. Then rest ten days or until you are convinced that there will be no dermatitis, then repeat the process. Continue similar series until the tumor has quite disappeared—possibly three to six months—then make exposure for less time or less frequently until the last vestige of the lesion disappears and the desired cosmetic effects are secured."

Dr. Barnum cited three cases successfully cured with the rays and states that "we are at liberty to prognose very favorably in the treatment of hypertrophied scars and keloids by the Roentgen ray. He sums up the following rules: I. Select the most suitable apparatus available and stick to that. II. At the slightest reaction on the healthy skin cease treatments until it fully subsides. III. Do not ray too far. IV. Do not ray too fast. V. Persevere.

INTERNAL HEMORRHOIDS.

William L. Dickinson, M. D., Saginaw, Mich., advises the treatment of internal hemorrhoids by means of the electric needle attached to the positive pole. Cocaine should be used locally, either by cataphoresis or by injecting it into the hemorrhoid, for if we neglect to take this precaution we will subject our patient to unnecessary pain. The electric needle is free from danger, and yet radical in result, and can be applied under local anesthesia. The patient being in Sim's position, the pile is exposed to a good light, or by means of a speculum and the cocaine used. A small platinum or cambric needle that has been insulated to about $\frac{1}{4}$ inch of its point is thrust into the hemorrhoid, and 10 to 20 milliamperes of current turned on for ten to fifteen minutes, when the pile soon becomes blanched. If the current has been strong enough, and employed a sufficient length of time, there will not be any bleeding when the needle is withdrawn, as we have had the styptic action of the positive pole.

Usually one puncture is all that is required for a hemorrhoid, but it is better to treat all of them at one time, and then wait until healing has taken place, when the bowel can be examined, and any that require it treated same as at first.

In most cases pain is not very severe after the treatment, but it is advisable to give the patient some anodyne suppositories, with instruction to use them in case there should be much pain.

The after-treatment consists in bathing the parts with an antiseptic and soothing solution.—*Medical Council*, July, 1906.

RADIUM IN DISEASES OF THE THROAT AND NOSE.

BY W. FREUDENTHAL, M. D., NEW YORK.

Though its action is a matter of speculation some benefit may be derived from radium in malignant affections.

In a case of tuberculosis of the larynx the patient derived benefit from the application of radium, but died later from pulmonary tuberculosis.

The treatment is applied by holding an aluminum tube in the throat containing 10 millig. of radium bromide of one million radio-activity. The parts are sterilized and cocainized, and the tube, fastened to a probe, inserted into the larynx. Some patients gag and make the treatment impossible, but, as a rule, this is not the case.

Ten cases of tuberculosis of the larynx have been treated with results gratifying in a certain number. Radium does more in this disease than any other remedy. Superficial ulcers may be cured by local application of lactic acid, but radium cures deep ulcers.

A case of rodent ulcer affecting the right ala nasi and extending over the cheek a distance of about one inch was treated by holding the tube of radium one inch from the ulcer for ten minutes every second day and increasing the dose so as to cause some reaction. A 5 per cent. ichthyol ointment was employed at night. There was marked improvement.

In three cases of malignant disease of the throat some benefit was derived from the radium treatment, especially relief in swallowing.—*Journal of Advanced Therapeutics*, June, 1906.

CHRONIC LEUKEMIA.

At a recent meeting of the Philadelphia Pediatric Society, Dr. Miller said that for the last two or three years he has had under observation three cases of leukemia that had been treated with the x ray. Two are splenic cases. They have repeatedly improved under this treatment, but have always relapsed. Although both patients are still alive, they are not at all well. He saw one of the cases recently. This woman has been under treatment for three years, with alternating periods of pronounced improvement, followed by equally marked relapses. Her spleen has lately increased enormously in size, filling more than two-thirds of the abdomen. When she first came under treatment she weighed only 96 pounds, with enormous spleen and 2g per cent. myelocytes. After two months x ray she weighed 150 pounds, and had no myelocytes; but the improvement was not permanent. The third case is one of lymphatic leukemia. The blood of this patient was examined recently for the first time in seven months. It was normal, and had evidently been so for six months. The usual history is that the x ray improvement is not a permanent one in most cases of leukemia; but this lymphatic case has apparently been cured by it. He believed that there were few instances of such a result.—*Archives of Pediatrics*, July, 1906.

PSORIASIS.

Dr. Geo. H. Fox is a firm believer in the value of exercise, and expresses the opinion that a professional trainer could quickly cure nearly every case of psoriasis if the patient would follow his vigorous treatment. He cites the case of a pugilist whose psoriasis disappeared every time he went into training, without any internal or local treatment.—*Clinical Reporter*, August, 1906.

X
PROGRESS IN MEDICINE.

BY F. C. SHATTUCK, M. D., BOSTON.

The debt of medicine to all those half-truths which are too indiscriminately classed under the terms quackery or charlatanism is real and should be recognized. We believe homeopathy to rest on assumptions unfounded in fact, untenable today. The most bigoted of us, however, for there is a bigotry of science as well as of religion—can not deny that homeopathy has advanced medicine, leading to a clearer knowledge of the limitation of the therapeutic action of drugs, of their uses and abuses.

The power of suggestion, the influence of mind over body, whether exercised through hypnotism, mind cure, faith cure, Christian science, what you will, throws a flood of light on physiology and pathology, stimulates the study of experimental psychology, illuminates the influence of the nervous system on the circulation and thus on nutrition. An eminent orthopedist recently classed the natural bone setters, so-called, as forerunners of science, at a time when ignorance as to the action of trauma and disease on joints was profound. They, relying on common sense and observation alone, achieved results which science, timid from knowledge of its ignorance, failed to achieve. There is always a germ of truth in every form of irregular (unscientific) healing—a fact which it behooves us to recognize and be ready to apply.

In a positive sense we know more than our predecessors; in a relative sense we may be said to know less. The farther we advance into the empire of ignorance the larger we find it to be, each mountain peak showing higher peaks in the distance.—*Indiana Medical Journal*, August, 1906.

THE LEUCODESCENT THERAPEUTIC LAMP.

Lamson Allen, M. D. (*N. A. Journal of Homeopathy*, August, 1906), reports a variety of cases where light from the lamp has cured by its action in destroying ptomaines and bacteria.

Case I.—Male, aged 22, abscess in groin, extending to right testicle. Cured in seven months.

Case II.—Mrs. P. Occipital headache for many years, without known cause. Ten treatments with lamp to spine and occiput cured.

Case III.—Miss C. C. Indolent ulcer on left leg; leg, ankle and foot greatly swollen, with great soreness and stinging pain. Thirteen treatments given every second or third day. Cured.

Case IV.—Boy, aged 14. Acute yellow jaundice. Ill four weeks, body very yellow. Applied L. T. L. over chest, liver and abdomen anterior and posterior for twenty minutes. Cured by five treatments in five days.

Case V.—Mrs. O., aged 18. Pain in right side of abdomen at McBurney's point. Diagnosed as recurrent appendicitis by five different surgeons. Also tender over gall-bladder, right ovary, with a great deal of pain running from small of the back over crest of right ilium, as well as pain under both shoulder-blades, more under the right. Took two treatments a day for two and a half weeks, then one treatment a day for one week. Cured.

Case VI.—Mr. P, aged 80. For twenty-seven years had a scab on nose which would grow black, dry up, drop off and re-

form again. Within three weeks had become very tender and irritable. Cured in three weeks.

Case VII.—Mr. F., carpenter. Injury of right knee by falling on sharp stone. Knee greatly swollen and painful. In bed five days without improvement. Three applications of the lamp of thirty minutes each took away all pain and soreness and reduced the swelling, so that he was back to work again in one week.

Case VIII.—Mrs. H., chronic bronchitis with threatened consumption, irritable heart with palpitation. Eight treatments cured.

Case IX.—Mrs. H., multiple cystic fibroid tumor of the uterus, undergoing cancerous degeneration. Uterine hemorrhage for past two years. Lately has had continuous flowing for nine consecutive weeks. She improved so much under the light treatment as to promise ultimate recovery.

Case X.—Mrs. D., tuberculosis of both lungs. Had daily treatments for three months. Cured.

Case XI.—Mr. L., machinist; tuberculosis of right lung. Daily treatments. Cured in two months.

Case XII.—Mr. L., multiple fistulae about the testicles and buttocks. Eighteen openings discharging from one-half to one and one-half pints of pus in twenty-four hours. Was nearly cured in two and a half months.

Cases of cancer of the breast and uterus showed great improvement under treatment.

DECREASE OF THE CONSUMPTION DEATH-RATE.

BY PROF. ROBERT KOCH.

I wish to draw your attention to a phenomenon which deserves the greatest consideration. I mean the gradual and very considerable decrease of the consumption death-rate in some countries. In England this decrease has been going on for about forty years. Strange to say, it is less in Scotland, and in Ireland there is no decrease. In Prussia the decrease of tuberculosis is very marked. During the ten years from 1876 to 1886 the pulmonary phthisis death-rate was equally high. Since 1886, however, it has fallen from year to year and the decrease is now more than 30 per cent., i. e., about one-third. It has been calculated that tho the population has meanwhile increased, the number of people who die every year from pulmonary phthisis in Prussia is now about 20,000 less than it was twenty years ago. In other countries, Austria and Hungary, for instance, the pulmonary phthisis death-rate has remained at the former very considerable height. It is hard to give reasons for this singular behavior of tuberculosis in the said countries. Probably several factors have co-operated. The improvement of the situation of the lower classes and the better knowledge of the danger of infection, the consequence of which is that people no longer unwittingly expose themselves to it, have certainly helped to reduce tuberculosis. I am firmly convinced, however, that the better provision for patients in the last stage of pulmonary phthisis, namely, the lodging of them in hospitals, which is done in England and in Prussia to a comparatively large extent, has contributed most to the improvement. I am confirmed in this opinion especially by the behavior of tu-

berculosis in Stockholm where, as already mentioned, comparatively many cases of phthisis are treated in hospitals and where also in the course of the last decades the death-rate from phthisis has gone down 38 per cent. From this, however, we derive the lesson that the greatest stress is to be laid on this measure, namely, *the placing of cases of pulmonary phthisis in suitable establishments*; and far more care should be taken than hitherto that such patients do not die in their dwellings, where, moreover, they are for the most part in a helpless situation and inadequately nursed. If cases of pulmonary phthisis are no longer, as hitherto, rejected by the hospitals as incurable; if, on the contrary, we offer them the best attainable nursing gratis and can even in some cases hold forth the hope of cure; if, moreover, their families are cared for during their illness, not the slightest compulsion will be necessary to induce a still greater number of these unfortunate patients to go to hospitals than at present.—*Lancet*, May 26, 1906.

THE THERAPEUTIC VALUE OF ANTITHYREOIDIN IN THE TREATMENT OF EXOPHTHAL- MIC GOITRE.

Elsner and Wiseman (*N. Y. State Jl. of Med.*, June, 1906), draw conclusions, based on twelve cases of typical and a greater number of atypical exophthalmic goitre treated with antithyreoidin, which state very fairly what may be expected of the remedy. We therefore quote them.

3. We are positive that antithyreoidin is a remedy which can be used for the relief of the annoying and alarming symptoms of exophthalmic goitre in typical and atypical cases. The greatest improvement

is found in the relief of the tachycardia, precordial distress, and tremor. This improvement is hastened by rest in bed and close attention to diet. *Rest in bed and diet alone, without the administration of antithyreoidin, will not lead to the same degree of cardiac comfort.*

4. Improvement of one or more of the symptoms of the disease is likely to follow within from three to seven days after the beginning of the use of the remedy. If there is no improvement of the symptoms after from three to four weeks of administration, the chances are against ultimate benefit from the prolonged use of the serum. In serious cases it will be necessary to continue the treatment during many months. In all cases after the disappearance of the subjective symptoms, it will be wise to administer unsalted butter and cream. To replace the phosphorus which is lost by the excessive excretion of phosphate in the urine, some nucleo-proteid is given—protelin was used in the cases reported. Finally a liberal quantity of proteid is given in the form of eggs, meat, fish and cheese.

Alt reports most striking improvement even in very serious cases. With gain in weight (which ranged from 30 to 56 pounds) comes reduction in the pulse rate, disappearance of the tremor and of other nervous symptoms, and finally, in all cases, a diminution in the size of the thyroid. The improvement has so far (two years) been permanent.—*Interstate Med. Jour.*, August, 1906.

THE DOCTOR'S WORK.

"As I sit and muse and think sometimes on the work of days gone by, there comes to my mind the one example of the perfect physician. He was advanced in years when I knew him, but his life had been spent in study for the advancement of his profession, his day's work had been spent in relief of suffering humanity and without charge, for he kept no books; he was careless as to his personal appearance and habits, and negligent as to his office appointments. Well do I remember his little tin sign hanging at the bottom of the stairs and creaking with every puff of the wind, and bearing this legend: 'Dr. Blank. Office Up Stairs.' Well do all remember who knew him, his utter self-abnegation and ever ready willingness to sacrifice himself for the benefit of others. One day, in making a physiological experiment on himself, in order that he might be of use to mankind, he passed away. As we bore his poor, emaciated body the next day along the street to its last resting place, the people whom we passed instinctively stopped and bowed their bared heads.

"He had no means with which to purchase a tombstone, but we gave to him the most fitting and appropriate epitaph ever rendered to man. We placed at the head of his simple grave his little old tin sign: 'Dr. Blank. Office Up Stairs.'

"And so, my friends and fellow practitioners, when we have finally finished our day's work, and have been called in consultation with the Great Physician above, may we all deserve to have as our sign: 'Office Up Stairs.'"—Dr. C. Holtzclaw, *Carolina Medical Journal*, June, 1906.

THE TREATMENT OF PRURITUS ANI.

X
Dr. F. S. Macy (*New York Medical Journal*, April 28, 1906), says that this lesion is more often due to a tight sphincter associated with fissures and stubborn constipation. In but few cases can local applications be depended on to give relief. Where the lesion is due to parasites, an old dysentery, etc., other methods may suffice, but as a rule dilating the sphincter effects a cure. His method is as follows: "Have the patient insert into the anus as large a dilator as it will comfortably accommodate, immediately after retiring. It should be retained at least fifteen minutes. Let him do this every night until the muscles have relaxed sufficiently to receive a larger size. This treatment should be continued, as in other instances of gradual dilatation, until the sphincter is considerably looser than it is intended ultimately to be. This method, unlike divulsion, does not menace the integrity of the structure. Unless there be some rectal constriction, the small, blunt, hard rubber instruments found in the shops in graduated sizes are all that is necessary, and are inexpensive. In cases where the skin about the anus is not as well nourished as it should be, or when there are nervous or infectious complications, I supplement this treatment by introducing a tampon once daily after a stool, of ichthyol 10 per cent in glycerin solution, if there is constipation, or in a lanolin menstruum if there is not, well up into the rectum. This is best done thru the speculum. Tho the latter may cause some pain at first, the insertion of the instrument is itself an aid to the treatment, and the patient will tell you he feels better for it.

Relief from this method has been immediate in all the cases I have so treated. The fissures heal, when there are any, and the condition of chronic constipation is much benefited. The itching ceases with the insertion of the dilator. Of course, it recurs in the intervals between the application of the instrument, but with less severity and less frequency day by day, until it disappears altogether.

I seldom have occasion to use local applications, except, of course, for definite lesions. For these some astringent dusting powder or other medication appropriate to the case may be necessary. Equal parts of the fluid extract of hamamelis and the tincture of iodine are a combination with a wide range of usefulness. Applied locally with a camel's hair brush, it stimulates the circulation in the part, is nutritive and alterative. The fluid extract of hamamelis, in particular, appears to be of more use about the perineum and the rectum than elsewhere about the body. I advise the patient, also, to bathe the parts frequently during the day with cold, even iced water, with or without the addition of an antiseptic, according to circumstances. When the pruritus is so intolerable as to require instant attention, I find that a solution in water of bichlorid of mercury, one part in five hundred, applied ice cold and instantly washed away with clear iced water, will give relief when other means fail. Menthol in alcoholic solution, 0.64 gram in 30 c. c., is also useful. I have already mentioned several other local applications, but, as I have said, I seldom find it necessary to use them. Inserting the speculum or a suitable dilator will often give as immediate and as great relief."

CHEMISTRY OF SECRETIONS OF STOMACH WITH SPECIAL INVESTIGATION OF SALOMON'S TEST FOR CARCINOMA OF THE STOMACH.

Reicher (*Archiv. Verdanungs Krankheiten*, Bd. XII, 3).—Reicher in repeating Salomon's test for carcinoma of the stomach on 23 cases, of which 5 were carcinoma; 4 were achylia; 3 chronic catarrh; 2 chronic ulcer centricula; 3 normal; demonstrated Salomon's test positive in 7 of which 4 were carcinoma; 2 achylia and 1 subacidity. The test recommended by Salomon is as follows: (1) Patient receives fluids, a. m., and fluids and food free from albumen at 2 p. m. (2) Stomach is washed clean at 9 p. m. (3) Abstinence of everything during night. (4) Stomach lavage twice with 400 cc. physiological salt solution next a. m. (5) This solution is tested with Esbach's and Kjeldahl's method for total solids. Salomon's conclusions are as follows: (1) In all cases of carcinoma of the stomach, Esbach's reagent produced a flocculent precipitate and Kjeldahl's method showed more than 25 mg. total solids per 100 cc. (2) The majority of the other stomach affections (nervous dyspepsia, chronic gastritis, gastropnoia) produced only at most a slight cloudy precipitate with Esbach's and 16 mg. Kjeldahl. (3) These findings (as in 2) were also present in chronic ulcers. Fresh painful ulcers were not examined. (4) When no flocculent precipitate was present with Esbach's, ulcerative processes in the stomach were thought improbable. Reicher gives the results of Siegel, Berent, Gutmann and Richtenstein, all of which have shown more or less uncertainty of this method.

He shows that this reaction can take place in the presence of serum albumen,

serum globulin, albumosen, peptones, nucleo-proteids, purinbases, mucin and mucin-like bodies as all these are precipitated by Esbach's reagent.

By numerous experiments he shows the influence of each one of these products on this test and points out many errors and false deductions to which it is subject.—*Interstate Med. Jour.*, August, 1906.

MICROSCOPIC EXAMINATION OF THE STOMACH CONTENTS AS A MEANS OF DIAGNOSING CARCINOMA OF THE LESSER CURVATURE OF THE STOMACH.

Ziegler (*Zeitsch. f. Klinische Med.*, Bd. LVIII, H. 5 and 6).—Ziegler says that the induration of carcinoma of the lesser curvature causes decreased motility of the stomach. In these cases lactic acid bacillus, or the thread bacillus are found microscopically. Examination is made as usual two and a half hours after test breakfast free from lactic acid, or seven hours after a test meal showing no microscopic findings (or two hours later), or on an empty stomach a. m. Microscopic findings show bacilli, starch muscle fibers and leucocytes on top of each other, the latter never being found in chronic gastritis, which findings demand a diagnosis of carcinoma ventriculi in an early stage (before the presence of blood, palpable tumor, ascites or glands). Lavage does not change these findings. Therefore in cases in which the stomach appears to be empty microscopically, leucocytes, food-stuff and bacilli are found in the washings and the diagnosis of carcinoma of the stomach is indicated. He was able to diagnose two cases of beginning carcinoma of the stomach by this method.—*Interstate Med. Jour.*, August, 1906.

THE IMPORTANCE OF EARLY DIAGNOSIS IN CANCER OF THE RECTUM AND SIGMOID.

In a paper read before the Nebraska State Medical Association, at Lincoln, Neb., May 1-3, 1906, the author, Dr. R. D. Mason, of Omaha, Professor of Rectal and Pelvic Diseases in the John A. Creighton College, directed attention to the importance of an early diagnosis in malignant diseases, because, he said, there is always a time when they are purely local and operative measures will in most cases prove curative. He believes something may be done in the way of forestalling malignant trouble by removing the other abnormal conditions, such as hemorrhoids, fistulae, ulcerations, etc., that are acting as sources of local irritation. He stated that from his own experience as well as from the writings of others a very large per cent of rectal cancers are preceded by some less formidable disease of long standing, and further, that "when a patient comes to me with some trouble and I find a tumor of any kind, no matter whether it be a hemorrhoid, some form of benign growth, or even should there be a fistula ulceration, or any other abnormal condition of importance, I feel that proper treatment is imperative and almost as urgent as it would be should a woman come with a tumor in her breast. In either case, if left untreated, no harm may result, yet there is always the possibility that malignant disease may be started with fatal results." The paper closed with a plea to the general practitioner, whom these people first seek for advice, to use greater care in examinations and give their patients the benefit of an early diagnosis and operation while there is still some hope of permanent relief.—*Virginia Medical Semi-Monthly*.

EARLY DIAGNOSIS OF CANCER OF LIP AND TONGUE.

The most important point in the diagnosis of cancer is that it never commences as a sore with ragged edges, eating from without down into the tissues affected, as do sores from cold, syphilis, or other causes. Cancer always commences from the inside and works outward. We first notice a sore with indurated base, which rapidly scabs over, the scab drops off and the sore appears on the point of healing until another scab forms, develops and falls off, till finally the typical cancerous ulcer begins with jagged, indurated edges. The cancer may start as a raised papillomatous surface, covered with epithelium, or cracks, and fissures, or small shot-like tubercles. In whatever form it commences it will be surrounded by submucous induration. The scabs will rise and come off, the parts looking healthy underneath until they break down and the ulcer forms.

After cancer has gone on to the ulceration stage the differential diagnosis may be difficult for a while. Cancer and chancre will then present sores alike in appearance. Both are painless, both have indurated bases, both have enlargement of adjacent glands, both have the hollowed-out indolent sore, but chancre will generally show some evidence of syphilis in other parts of the body or the diagnosis may be cleared up in a short time by anti-syphilitic treatment.

Rodent ulcer of lips should not be mistaken for cancer if we remember that it commences as a red hole, eating and filling and always commences from the outside and works inward.

Tubercular disease of the lips will generally be readily differentiated by the existence of tuberculosis of other parts.

PREVENTION AND CURE OF TUBERCULOSIS.

The Detroit Board of Health has issued the following instructions:

HOW TO PREVENT CONSUMPTION.

The spit and the small particles coughed up and sneezed out by consumptives, and by many who do not know that they have consumption, are full of living germs too small to be seen. These germs are the cause of consumption.

Don't spit on sidewalks—it spreads disease and it is against the law.

Don't spit on the floors of your rooms or hallways.

Don't spit on the floor of your shop.

When you spit, spit in the gutters or into a spittoon. Have your own spittoon half full of water, and clean it out at least once a day with hot water.

Don't cough without holding a handkerchief or your hand over your mouth.

Don't live in rooms where there is no fresh air.

Don't work in rooms where there is no fresh air.

Don't sleep in rooms where there is no fresh air.

Keep at least one window open in your bedroom day and night.

Fresh air helps to kill the consumption germ.

Fresh air helps to keep you strong and healthy.

Don't eat with soiled hands—wash them first.

Don't neglect a cold or a cough.

HOW TO CURE CONSUMPTION.

Don't waste your money on patent medicines or advertised cures for consumption, but go to a doctor or a dispensary. If you go in time you can be cured; if you wait until you are so sick that you can not work any longer, or until you are very weak, it may be too late; at

any rate it will in the end mean more time out of work and more wages lost than if you had taken care of yourself at the start.

Don't drink whisky, beer or other intoxicating drinks; they will do you no good, but will make it harder for you to get well.

Don't sleep in the same bed with anyone else, and if possible not in the same room.

Good food, fresh air and rest are the best cures. Keep in the sunshine as much as possible, and keep your windows open, winter and summer, night and day—fresh air night and day, is good for you.

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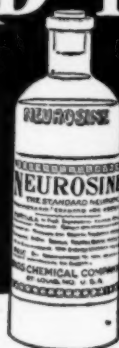
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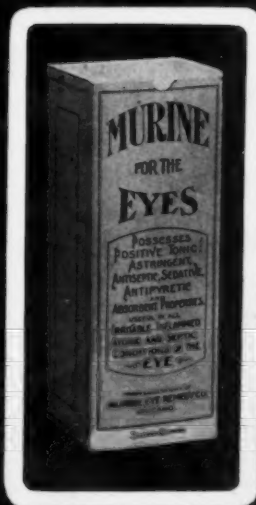


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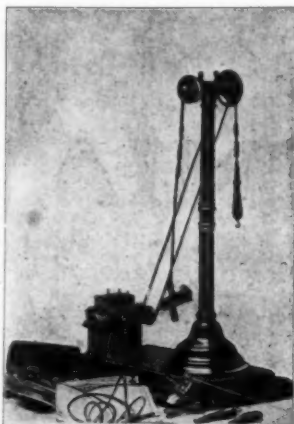
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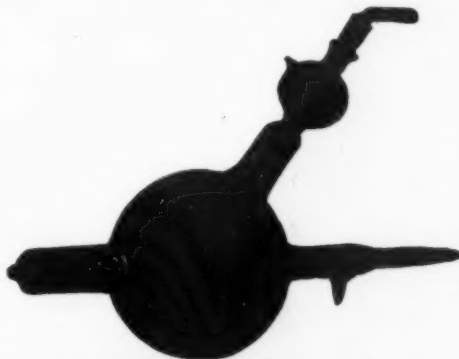
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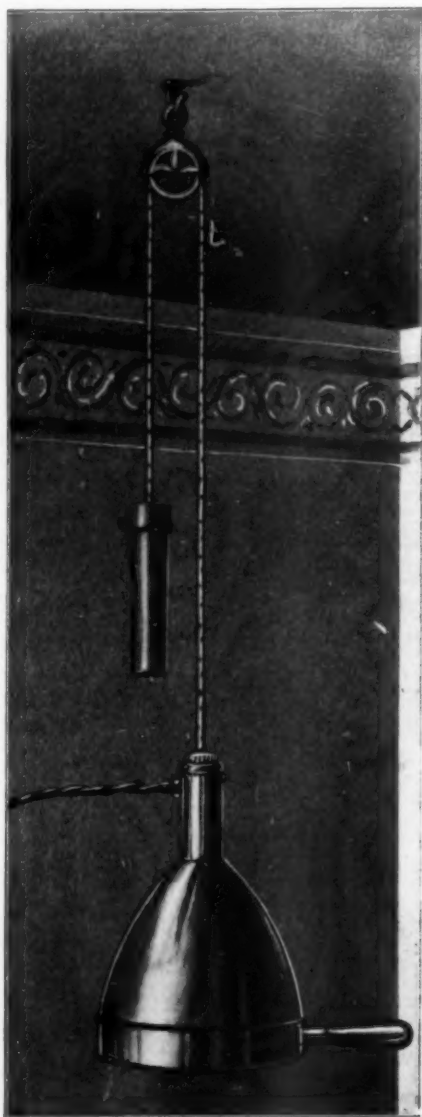
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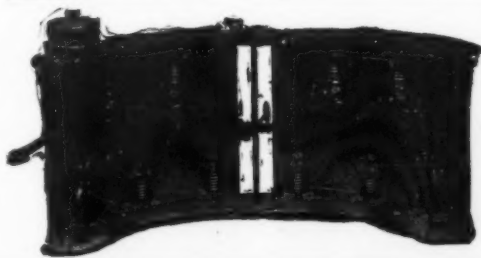
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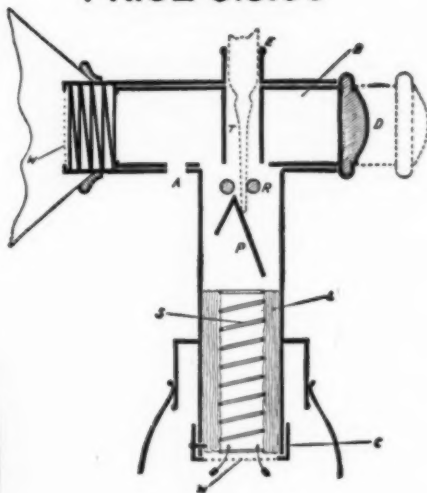
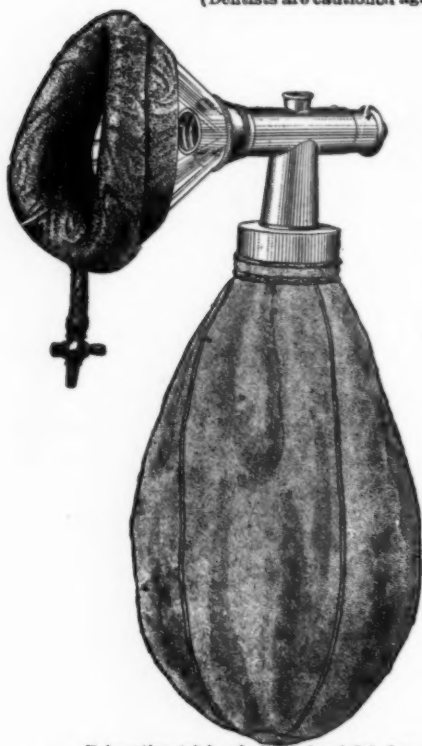
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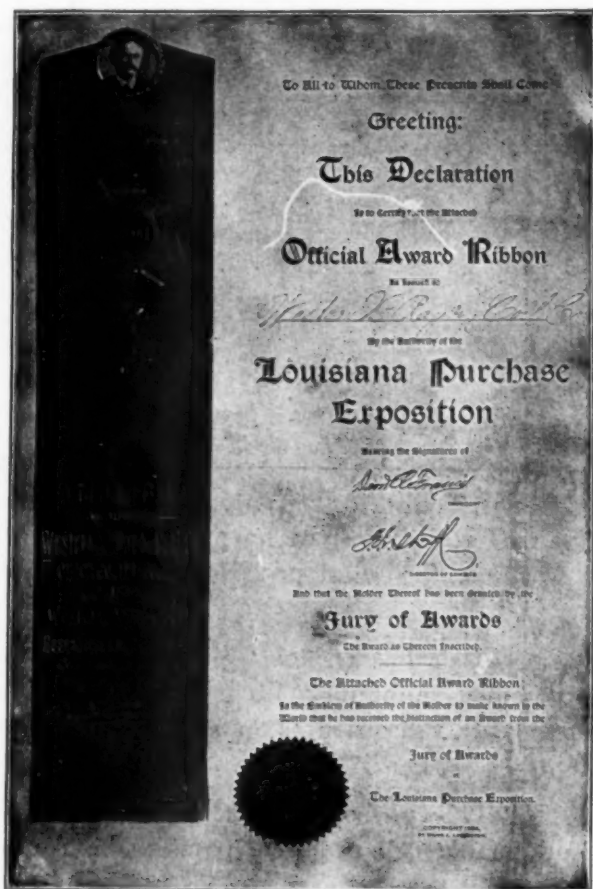
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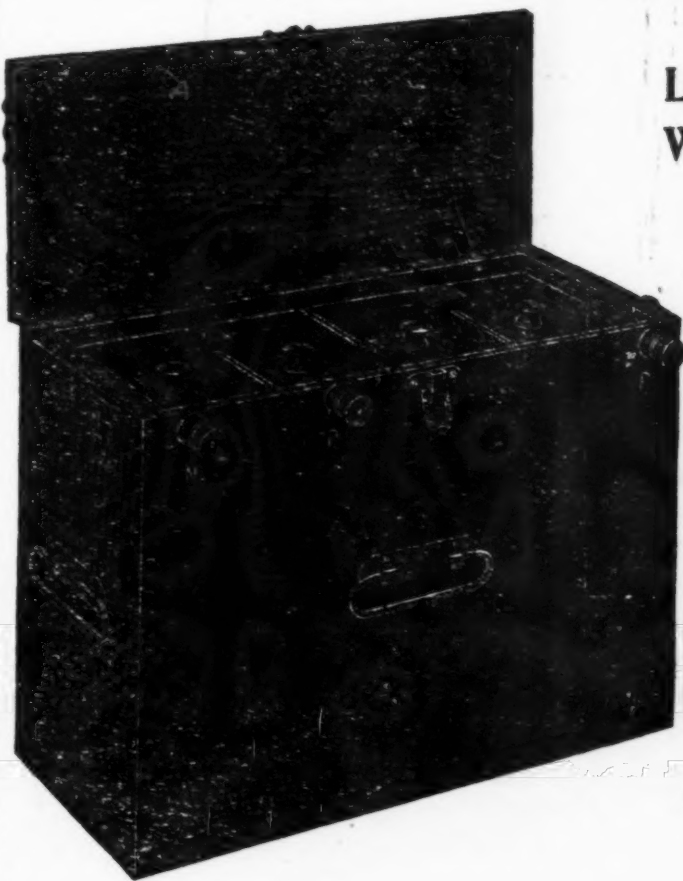
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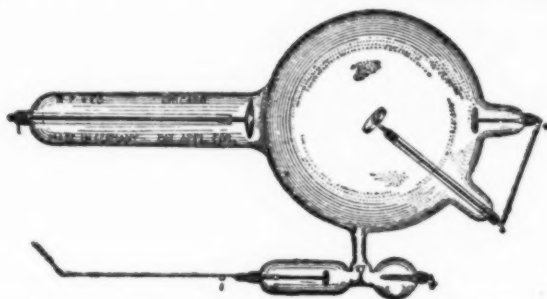
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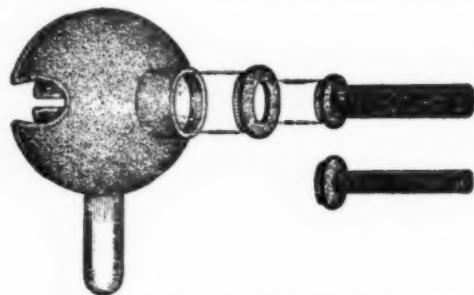
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